

REPORT FROM: ASSISTANT DIRECTOR OPERATIONAL SERVICES

TO: CLIMATE EMERGENCY WORKING GROUP

DATE: 16TH SEPTEMBER 2024

Report Author: David Walker Tel. No: 01282 661746

E-mail: david.walker@pendle.gov.uk

FLEET DECARBONISATION REVIEW 2024

PURPOSE OF REPORT

To provide Members with an overview of the findings and recommendations within the Energy Saving Trust's review of Pendle Borough Council's operational fleet.

To provide an update on the carbon emission savings created through the use of Hydrated Vegetable Oil (HVO) within the Council's recycling, street cleansing and landscape maintenance fleet.

RECOMMENDATIONS

- **1.** That the information within the report be noted.
- 2. That the Working Group acknowledges the continued use of alternative fuels within the recycling and Landscape maintenance fleet and the subsequent increases in costs for fuel further expansion of its use will bring.
- **3.** Operational Services leads now work toward introducing electric charging infrastructure and vehicles that are suitable for its operational needs into the Council's fleet.
- **4.** The Council considers the introduction of an electric mayoral vehicle at time of replacement.

REASONS FOR RECOMMENDATIONS

- 1. Members are fully advised on the usage, associated costs and carbon savings created by the use of HVO.
- 2. To ensure the Council works towards meeting its target to reduce emissions from its transport fleet as set out within the Climate Emergency Action Plan.

ISSUE

1. Pendle Council declared a Climate Emergency in July 2019 and has committed to taking action to become carbon neutral by 2030 or as soon as possible after that date.

- 2. Within the Climate Emergency Action Plan 2020- 2025 we have identified an objective of supporting and enabling sustainable travel.
- 3. Actions that Pendle will take are listed as being the introduction of electric vehicles into PBC's transport fleet and explore options for bio-gas from recycled vegetable oil and the introduction of an electric mayoral vehicle
- **4.** The majority of the Council's fleet is due replacement in November 2026 and prior to work commencing on a specification for that fleet it was agreed that a full decarbonisation review be completed in order for the Council to fully understand the options open to it in relation to fleet.
- 5. The review provided 13 recommendations which included options for the replacement fleet when the market has vehicles available, improving data collection and installing charging infrastructure for fleet vehicles.
- **6.** The report advises that there are currently no suitable replacements for the 22t Refuse Collection Vehicles (RCV) and electrically powered 3.5t units would not have the same payload or towing capacity as their diesel powered alternatives.
- 7. The report similarly advises electric sweepers are not yet suitable for our needs
- **8.** The report does advise that Light Commercial Vehicles could be changed to electric powered alternatives achieving a Whole Life Cost per mile saving of 3 pence resulting in a saving per vehicle of £2,621.00 over a 4 year lease.
- **9.** The report advises that the Council could investigate the use of electric cars or small LCV if it replaces the current petrol-powered units in 2026. Based on the reports identified Whole Life Cost calculations petrol remains the most cost effective option in this scenario. WLC over a 4 year lease show petrol will save £1,403.00 per vehicle
- **10.** The report advises that the Council could investigate the use of an electric car for the mayor and over a 4 year lease based on the WLC within the report such a move would save £10,000 through to £16,000 dependent on vehicle chosen against the new version of the current mayoral car.
- **11.**Overall financial savings created over four years dependent on vehicles purchased range from £23,000 to £29,000.
- **12.** Overall Green House gas saving over 4 years calculates to 50t. (8.10t per van and 10t for mayors car)
- **13.** Based on the above the next vehicle contract should be termed for 8 years allowing two cycles of savings over diesel alternatives to be achieved.

HVO

- **14.** In 2021 after completing investigation into electric vehicles our attentions turned to HVO which is described as being a cleaner burning alternative to standard diesel that can be used in both road and off road applications.
- **15.** Hydrated Vegetable Oil was initially introduced into six of the Council's large goods fleet each vehicle being used on recycling rounds. The trial has expanded and we now have 15 vehicles using HVO on a daily basis.

- **16.** From the 1st January through to the 30th June 2024 the vehicles had used 28,340 litres of HVO
- **17.** As previously reported emissions are recorded as being 2.30kg per litre lower than diesel fuel resulting at the time of this update in a carbon saving over the period of 65,182.00kg of Co2.
- **18.** The setback in moving to HVO was anticipated to be with local infrastructure and cost. At the time of reporting there are still no local forecourts supplying HVO fuels and as such we continue to use re-purposed storage tanks at the Fleet Street Depot.
- **19.** In relation to costs HVO remains higher in price than diesel. The Energy Saving Trust report HVO is 19 pence per litre higher than road diesel.
- **20.** Based on the information within the Energy Saving Trust's report from the 1st January through to the 30th June the Council incurred additional costs of £5,384.60 for fuel by using HVO.
- **21.** Within the report presented to the Climate Emergency Working Group in September 2021 we estimated that the cost of HVO based on full fleet usage would increase expenditure on fuel to somewhere in the region of £24,000 and £27,000. We remain within this forecasted figure.

IMPLICATIONS

Policy: None arising directly from the report.

Financial: Cost identified within the report show an additional £5,384.60p has been spent purchasing HVO over road diesel. Overall savings on a four year lease between £23,000 and £29,000 could be achieved from November 2026 if we were able to introduced electric vehicles into the fleet.

Legal: None arising directly from this report.

Risk Management: HVO is reported to be a safe alternative to diesel with no modifications or special storage requirements needed. Vehicles operating on HVO can return to diesel fuel if required without the need for tanks being drained or vehicle modification. Infrastructure required to run electric vehicles, further investigation needed into the capability to provide suitable charging points at Fleet Street Depot.

Health and Safety: None arising directly from the report.

Sustainability: None arising directly from the report.

Community Safety: None arising directly from the report.

Equality and Diversity: None arising directly from the report.

APPENDICES:

Appendix 1 - Energy Saving Trust Fleet Decarbonisation Review Report

LIST OF BACKGROUND PAPERS: None.